



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,586	02/05/2002	Kenneth E. Lee	1082-008	8283

33461 7590 04/23/2003

SULLIVAN LAW GROUP
1850 NORTH CENTRAL AVENUE
SUITE 1140
PHOENIX, AZ 85004

EXAMINER

MILLER, EDWARD A

ART UNIT	PAPER NUMBER
----------	--------------

3641

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/068,586

Applicant(s)

LEE, KENNETH E.

Examin r

Edward A. Miller

Art Unit

3641

-- The MAILING DATE of this communication appears n th cover sh et with th correspondence address --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) 1-24 and 37-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-36 is/are rejected.
- 7) ☒ Claim(s) 28-33 is/are objected to.
- 8) ☒ Claim(s) 1-58 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,4. 6) ☐ Other:

Art Unit: 3641

1. Applicant's election of Group III in Paper No. 6, filed February 5, 2003, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 25-27 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strauss et al. '868 in view of Bazaki, Warren, Strauss et al. '557 and Lee et al..

Strauss et al. '868 teaches a combination of layers as a propellant, wherein one layer comprises RDX and the alternate layer comprises CL-20. Binders and plasticizers are taught, including BDNPA/F, for example at col. 3, lines 19-43. It would have been obvious to use a thin layer of the notoriously well known C-4 (PBX) explosive which is essentially RDX with about 10% binder ingredients, having a thickness that is thinner than the minimum detonation thickness, as the slow burn RDX layers, along with the preferred CL-20 fast burn layers. Such would comprise these claims as broadly set forth. Further, to the extent desired, it would have also been obvious to use a mixture of particles to obtain the desired properties, as is also notoriously well known. This is further shown in view of Bazaki, col. 3, lines 50-59, Warren, col. 3, lines 25-33 and col. 3, line 66-col. 4, lines 9, Strauss et al. '557 in the Abstract, and Lee et al. for a teaching of a CL-20 composition, for example, in the Abstract. Variation of notoriously well known ingredients and amounts would have been obvious to one of ordinary skill in the art. It is well settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. *In re Boesch*,

Art Unit: 3641

617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

Further, where the ingredients are well known and combined for their known properties, the combination is obvious, absent unexpected results, *In re Crockett*, 126 USPQ 186, *In re Pinten*, 173 USPQ 801, and *In re Sussman*, 43 CD 518. Also, it is prima facie obvious to combine two compositions, (Here C-4 and the Lee et al. CL-20 composition, e.g., each taught for the same purpose, to yield a third composition for that very purpose. *In re Kerkhoven*, 205 USPQ 1069, and *In re Susi*, 169 USPQ 423. The respective properties of CL-20 and RDX (C-4) compositions are well known and shown generally in the references, such as by the taught burning speed, density, etc.

4. As to claims 28-33, it is not deemed to be reasonably suggested to use the combination of both the respective ingredients and binders including the swellable binder and the silicone fluid binder ingredient (compare applicant's cited Wanninger et al. and Eckels et al.) as claimed in claim 28 and claims dependent thereon. These claims are deemed free of the prior art, to the extent properly understood. This comprises reasons for the indication of allowable subject matter.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 25-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As the claims are set forth, it is not clear what the metes and bounds are. Claim 25 sets forth C-4 in line 3, but the ingredients and amounts in the following, further indented lines, which modify the C-4 recitation, are not C-4, e.g., are not the correct formula for C-4. Thus, this language is indefinite, and possibly a variable recitation, whereas C-4 has a set composition, as well known to ordinarily skilled artisans, and defined, e.g., by military specification. This is further confusing in

Art Unit: 3641

claim 27, which recites a ratio of C-4 to additive compositions, but the relationship of the respective amounts and ratios are not clear. Claims 34-36 are indefinite as written. They recite properties, without any recitation of how to obtain these properties. Thus, they are indefinite, for failing to reasonably set forth the manner in which these properties are obtained. They are an improper implied limitation on the amounts and/or ingredients that may be used, or they fail to further limit the claims they depend on by reciting properties that are inherent in the claims they depend from. This later would also violate 35 USC 112, 4th paragraph, and it is further indefinite what applicant's intent is, in this regard. This is also contrasted with claim 33, where the corresponding property limitation and the ingredient so limited are clearly set forth. While this, e.g., claim does not have any further problems, it still incorporates the problems of the claim(s) it depends from.

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 25-27 and 34-36 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,214,137. Although the conflicting claims are not identical, they are not patentably distinct from each other because of clear overlap as to the CL-20 part of the composition. The C-4 composition is notoriously well known, and it is well known and obvious (see the case law cited in paragraph 3 above) to combine two

Art Unit: 3641

combinations to obtain the average of their properties. This is particularly the case with the claims having a scope of "comprising," both herein and in the patent.

9. To the extent appropriate, listing references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. Note also MPEP 2004, in as much as applicant did not disclose Lee et al., applied above.

10. See MPEP § 706.02(l) - § 706.02(l)(3) for a discussion of prior art that may be disqualified under 35 U.S.C. 103(c). However, note that as to paragraph 3 above, the rejection would stand even without Lee et al.; Lee et al. is helpful in one respect, e.g., combination of two previously known compositions, but the elimination of Lee et al. would not per se overcome the 103 rejection.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wulfman teaches methods of reformulation including of C-4, and the other references cited on the PTO 892 form teach, e.g., ingredients and mixtures of explosives for a composition.

12. Any inquiry concerning either this or an earlier communication from the Examiner should be directed to Examiner Edward A. Miller at (703) 306-4163. Examiner Miller may normally be reached Monday-Thursday, from 10 AM to 7 PM.

If attempts to reach Examiner Miller by telephone are unsuccessful, his supervisor Mr. Carone can be reached at (703) 306-4198. The Group fax number is (703) 305-7687.

If there is no answer, or for any inquiry of a general nature or relating to the application status, please call the Group receptionist at (703) 308-1113.

Miller/em
April 20, 2003



EDWARD A. MILLER
PRIMARY EXAMINER